

**PRECISION ENVIRONMENTAL SERVICES, INC.**

**BULK ANALYSIS REPORT**

**Page #:** 2 of 2

**Client:** Alaska Copper Works

**Report #:** 796380

**Project:** 4700 S. Colorado

**Report Date:** 7-24-96

**P.O. #:** M54000

**Date Analyzed:** 7-24-96

<b>Client/Lab Number</b>	<b>Sample Location &amp; Description</b>	<b>Asbestos Type / %</b>	<b>Other Material</b>
796380 M54000	South pit, main bay, lt. brown chalky insulation material with fibers & cloth.	Amosite 10-15%	binder, soot, cellulose (1-3%)



**BULK SAMPLE ANALYSIS REPORT**

**CLIENT:** Alaska Copper Works  
628 Hanford St.  
Seattle, WA 98138

**REPORT #:** 796380  
**REPORT DATE:** 7-24-96

**PROJECT:** 4700 S. Colorado  
**P.O. #:** M54000

**DATE RECEIVED:** 7-24-96  
**DATE ANALYZED:** 7-24-96

**PAGE:** 1 of 2

Attached are the results of analysis of 1 bulk sample submitted for asbestos identification, Lab ID #796380.

The sample was analyzed in accordance with method EPA-600/M4-82-020: "Interim Method for the Determination of Asbestos in Bulk Samples".

The sample was initially examined under a Nikon SMZ - 2T stereoscopic microscope at a magnification of 10X to 60X. Fibrous material was examined for morphology and content.

Representative fibers from each sample were immersed in a fluid with a known refractive index. The specimens were examined under polarized light using a Nikon Labophot microscope with a McCrone Dispersion Staining objective under 100X magnification. Optical characteristics of the fibrous material were examined to determine the mineralogy of the fiber. The observed optical characteristics include angles of extinction, sign of elongation and refractive indices.

Separate layers of inhomogeneous samples are analyzed and reported separately. Unless otherwise stated, samples were quantified by calibrated visual estimation (CVES).

The samples analyzed in this report were provided by third parties not subject to control by PRECISION ENVIRONMENTAL SERVICES (PES). Consequently, the results presented represent microscopic examinations in PES laboratory facilities and PES makes no representation as to sample collection techniques or procedures. Test results pertain only to the samples submitted for analysis.

This report can not be represented by the client to claim product endorsement by NVLAP or any agency of the U.S. Government.

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**Analyst -** William F. Golloway

**Samples Collected by -** Third party.

**Reports Reviewed by -**   
**(Approved Signatory)**



# PRECISION ENVIRONMENTAL SERVICES, INC.

## CHAIN OF CUSTODY

Save Samples\*? Yes X No       

LAB ID #:                     

### SAMPLES SUBMITTED BY:

Company name: Alaskan Copper Works  
Address: 628 HANBOLD ST  
City, State, Zip: Seattle WA 98134  
Phone: (206) 382-8379 Fax: (206) 382-4309  
Contact: GERARD A. Thompson  
Job Name: 4700 Colorado  
Job Number:                     

### SAMPLE TYPE

AIR             
BULK           

### ANALYSIS REQUESTED

Phase Contrast Microscopy             
Polarized Light Microscopy             
Other                     

### TURN AROUND TIME

RUSH Please Fax Results  
24 HOUR                       
3-5 WORKING DAYS                       
OTHER (SPECIFY DATE)                     

RELINQUISHED BY: [Signature]

DATE: 7-24-96

TIME: 8:43

RECEIVED BY: [Signature]

DATE: 7-24-96

TIME: 08:43

\* NOTE: UNLESS OTHERWISE REQUESTED SAMPLES WILL BE ARCHIVED FOR 90 DAYS.

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